



AD-600 Installation Guide



Installation Guide

AD-600

General Information

The main panels of the AD-600 are made of polypropylene and are 2.36"(6 CM) in height. Cable trench caps are made of steel. Quick and easy installation is a strong advantage of the ConnectFloor systems. AD-600 compromises one of the most unique, cost effective, and easily installed low-profile floors on the market. No special tools are required. Professional quality installation can be achieved by flooring installers such as those for carpet tiles and PVC tiles; or carpenters, handymen, and even amateurs.

Installation Time

The following estimates do not include material preparation and handling time. For open space: Trained installer: 900-1200 sq. feet (80-110 sq. meters) per man-day. Newly trained or amateur: 600-800 sq. feet (55 – 75 sq. meters) per man-day.

Small rooms and irregular floor plans: may call for 20 to 30 percent more installation time. Good preparation and job site planning are very influential to installation costs.

Recommended Tools

Application

Electric Drill & Driver	Perimeter & wall finish
Chalk line	Marking straight line for large rooms
Pencils	General Markings
Steel rule	Measuring
Cutting Knife	Cut UniPanel into Sub-Panels
Scroll saw	Cut Wall Rail, Edge Rail at corners
Tape measures	Measuring

1. Before installation

The following Instructions should be read before installation:

- **a.** ConnectFloor systems are for **in-door use** only.
- **b.** Modular carpet is the standard **finish** flooring for the AD-600 (3'X3' carpet tiles are recommended).
- c. Condition: UniPanel (AD-611) and adhesive should be conditioned at room temperature, not lower than 40°F(5°C).
- d. Floor Preparation: Sub-Floor must be free of grease, oil, wax, and moisture or any other foreign material. All holes, cracks, and depressions should be filled with floor patching compound.
- e. Sub-floor of the job site should be generally **level**. Elevation variation shall be no more than 3/8"(1 CM) within 3.3 feet (1 meter).

2. Starting Line – laying instructions

To maximize usage of full panels at the borders, it is recommended that you select the longest walls or the entrance wall as starting point.

Note: Properly selecting the starting line is important. It saves labor time and materials. Other factors that may affect choice of the starting line include: door, ramp, entry wall, other long walls and so on.

General Office Example – (Drawing D605)

Use the longer wall as the primary starting wall. Starting from the corner, test sequence no. 1 and no. 2 UniPanels along both walls, connected by half-Connector. If extension is not obstructed, move on to

sequence no. 3. Be aware that any two walls might not be perfectly perpendicular to each other. If the second wall is at an angle less than 90° to the primary starting wall, the first UniPanel laid will need to be strategically offset from both walls to allow for extension of UniPanels in both directions. The resulting gaps to both walls will then be filled up with appropriate accessories. If the gaps are greater than 1/5"(5



mm) in width, Edge Rail should work well.

Lay out entire floor with complete UniPanels until the remaining walls cannot allow complete UniPanels up against them. Cutting or trimming pieces will be required for the remaining walls to finish the UniPanel matrix. There will also be removal of some panels that have been laid down to apply the ramping required at the entranceways. In figure D605A, note that in cases where doors swing inside the room their must be a 25 sq. ft. entrance area to maintain ADA compliancy. The actual ramping area can easily be added by removing one UniPanel in front of the door plus an additional half of a UniPanel to account for the length of the ramps.

3. Installation

- **a.** Apply **Sound Attenuation Blanket.** Spray adhesive, duct tape, or 3M adhesive tape may be used to hold down the sound blanket to the sub floor.
- **b.** Old carpet or resilient floor to substitute Sound Attenuation Blanket: For retrofit installation over existing commercial rated low-pile carpet, carpet tile, PVC tile and sheet vinyl, step a and b may be omitted. Depending on the old floor covering, Sound Attenuation Blanket may also be skipped. However, application over thick foam-backed or cut pile carpet is not recommended.



d. Repeat installation with full size Base Connectors: Starting from the second row, use full Base Connectors to UniPanels consecutively. No tool is needed. Extension of the Connectors and UniPanels is simple and straightforward.

e. Cable Trench: Base Connectors connect UniPanels at their corner feet as shown, setting the panels apart by a standard 3.54"(9 CM) gap. This automatically allows for a two-way uniform-width 3.54"

grid of cable trench every 23.62"(60 CM) on center. (Drawing D609)

Accessible Cable Trench - Clearance: 2.24"(57 mm) Width: 3.54"(90 mm)

To assemble a module of 23.63" X 23.63"(60 cm X 60 cm) coverage requires: 1 UniPanel + 1 Central Cap + 1 Base Connector + 4 Flank Caps



f. UniPanel: The main component of AD-600 system is the UniPanel, which is a composite panel of structurally independent Sub-Panels. The 20.06" X 20.06"(510mm x 510mm) UniPanel consists of 16 SubPanels each standing on 4 integral pedestals. The SubPanels are pre-connected by a .08"(2mm) uniform joint line on all sides to form the 16-square UniPanels. This feature provides maximum built-in flexibility for the panels to easily accommodate either any variance there might be in sub-floor elevation--as the joints are not rigid. Or, when encountering other architectural elements such as walls and doorways, the Panels can "break off" any of the SubPanels to conform to floor area constraints. (Drawing D610)

D610



Cut to Rows 3 : 1 or 2 : 2



Cut to Meet Irregular Perimeter or Door Frame



g. Central Cap and Flank Cap: Central Caps are to be installed at the intersection of Cable Trenches, and Flank Caps alongside UniPanels over the Cable Trenches. There is no need of tools of any kind. The trenches remain fully accessible--Caps can be simply lift up by hand, and re-place after cable

installation or service. (Drawing D609)

Note: This ease eliminates frequent coordination conflicts between trades. Instead of the contractors converging on job sites attempting to achieve opposite results (caps on/caps off, cables down/ cables up), the electrical contractor can route and lay the cables after the installation of ConnectFloor is completed. Carpeting is done when both trades are gone from the job site.

h. Ramp without Ramp Rail: The nominal width of the Ramp part (AD-625) is 4"(10CM). Plan Ramp installation according to width of the ramp area—this often corresponds to the opening of the adjacent doorway, or as required by applicable Building Codes. Use full ramp sections and then use the Free Standing Edge, to take up the residual space and provide a finish edge to the triangular sides of the ramp as well as carpeting. Use tape of sufficient width to tape down top and bottom of Ramp. Carpeted over, there is no visual transition between ramps and carpet. (Drawing D612)



- i. Free Standing (Skirting) Edge: It is a strip of aluminum extrusion shaped like a letter "F" crosssection-wise, with the top channel to receive the edge of carpeting. There is also a luminous strip on the top of the edge that provides a luminous strip that remains illuminated for about 6 minutes. Cut strips to required length, drill holes on top flange as needed and secure to UniPanels by flat-head screws. The vertical flange provides a finished edge to the exposed sides of ConnectFloor. (Drawing D614).
- j. Finish Wall / Perimeter: Various ConnectFloor accessories are designed to "round out" UniPanel installation by successively taking up the residual space after installation of the last full UniPanels or SubPanels along the finish wall. The wall may be finished by the accessories or by cutting the UniPanel to run +/-.08" from the wall. The optional accessories that can be used are located under Section 4 – Optional Trim Accessories.







k. Finish Wall of irregular shapes: Irregular perimeter spaces may be filled up by using a combination of Wall Rail, Edge Rail and Corner Rail units. The most flexible installation is

facilitated by using sections of Wall Rail cut to length with a scroll saw and set down perpendicular to the edge of the last irregularly laid ConnectFloor part. The sections' varying lengths are carefully measured so that they will fill up the entire space between the wall and the ConnectFloor that is already installed.

I. End Caps are used to trim and finish the ConnectFloor installation along the walls. Since UniPanels there on the first row are laid on Half Connectors, a kind of "partial cap" is needed to cap off the gap at the end of cable trenches running into the wall—hence the End Cap. (Drawing D611).

5. Finish Floor Covering: Commercial-rated modular carpet is the standard floor covering to be used over ConnectFloor systems. In general office area, apply adhesive in grid pattern; while for heavy traffic areas such as entrance or aisle, apply adhesive generously throughout. Press the carpet tile down firmly. If acceptable by the flooring manufacturer's specifications, 1" wide or wider double-sticky tape of sufficient viscidity may be substituted. Install as provided by the specifications.

6. Interior Partitions: Semi-permanent interior partitions can be erected on top of ConnectFloor AD-600. They may be built directly on top of ConnectFloor's surface, or over finished flooring such as

carpet tiles. To secure partition's floor track on top of ConnectFloor, pre-drill from partition's floor track through UniPanel of ConnectFloor, then, fasten with **blunt tipped screws** through the pre-drilled hole to avoid damage to cables underneath. "Ram setting" floor track to UniPanels is not recommended. Partitions thus installed will not interrupt the distribution of cables and wires underneath (Drawing D615).



4. Optional Trim Accessories

These following pieces of trim may be used in cases where the edge of the flooring does not butt completely up against the wall. The UniPanels, as mentioned in previous sections, can also be cut to meet up against the wall to finish the flooring matrix.

(1) When the residual space is less than 2.36"(6 cm) in width: Use Edge Rail (AD-623). Fasten Edge Rail through the pre-punched holes at both ends to the UniPanel or SubPanels with type-s or flat-head screws (Drawing D611).

(2) When the residual space is a width of 2.36"- 5.11"(6 cm ~ 13 cm): Use Wall Rail (AD-630) as a spacer. First butt the Wall Rail directly against the last UniPanel or SubPanels. Then, as described in step (1), fasten Edge Rail to take up the remaining gap (Drawing D611).

(3) Distance between 5.11"- 8.66"(13 cm \sim 22 cm): Use a row of SubPanels (1/4 of UniPanel) as a spacer. Butt the SubPanels against the last UniPanels. Connect the SubPanels by Half-Connector at trench. Then, fill the balance by single use or combined use of Edge Rail and/or Wall Rail to finish the remaining gap (Drawing D611).

(4) The final space left in the corner after use of the last Edge Rail: Use **Corner Rail** (AD-629), which has short segments that can be broken off, and each segment has a pre-punched hole to allow fastening to adjoining parts. (Drawing D611)

Ramp Rail: When installing ramp with Ramp Rail, cut Rail to length then insert between Ramp section and first UniPanels as shown. Pre-drill holes as needed on both the flat flange and the sloped flange, then secure it with flat-head screws to both the adjacent UniPanels and the Ramp sections. Carpet tile edges are tucked into the channels on top of the Rail. This provides easy rigidity and a finished look. The visible aluminum strip also serves as a ready reminder of the sloping (Drawing D612).

Edge Trimmers are used to trim and finish the ConnectFloor installation along the walls. They are set down on the small recessed "shelf" –on all four sides of the UniPanels designed to receive Flank Caps—along the starting wall to bring up the finished floor to a uniform elevation. In most cases, this edge trim is not used in typical installations. (Drawing D611).





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